# User's manual (short form)

eng

# NVIP-1DN3000H/IR-1P
# NVIP-1DN3020H/IR-1P
# NVIP-2DN3000H/IR-1P
# NVIP-2DN3020H/IR-1P

NOVUS®

http://www.e-camere.ro/camere-supraveghere-ip/Novus/NVIP-1DN3020H-IR-1P

# IMPORTANT SAFEGUARDS AND WARNINGS

## EMC (2004/108/EC) and LVD (2006/95/EC ) Directives

### CE Marking

Our products are manufactured to comply with requirements of the following directives and national regulations implementing the directives:

eng

- Electromagnetic compatibility EMC 2004/108/EC.
- Low voltage LVD 2006/95/EC with further amendment. The Directive applies to electrical equipment designed for use with a voltage rating of between 50VAC and 1000VAC as well as 75VDC and 1500VDC.

## WEEE Directive 2002/96/EC

### Information on Disposal for Users of Waste Electrical and Electronic Equipment

This appliance is marked according to the European 1000VAC Directive on Waste Electrical and Electronic Equipment (2002/96/EC) and further amendments. By ensuring this product is disposed of correctly, you will help to prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.
The symbol on the product, or the documents accompanying the product, indicates that this appliance may not be treated as household waste. It shall be handed over to the applicable collection point for used up electrical and electronic equipment for recycling purpose. For more information about recycling of this product, please contact your local authorities, your household waste disposal service or the shop where you purchased the product.

## RoHS Directive 2002/95/EC

Out of concern for human health protection and friendly environment, we assure that our products falling under RoHS Directive regulations, regarding the restriction of the use of hazardous substances in electrical and electronic equipment, have been designed and manufactured in compliance with the above mentioned regulations. Simultaneously, we claim that our products have been tested and do not contain hazardous substances whose exceeding limits could have negative impact on human health or natural environment

**Information**
The device, as a part of professional CCTV system used for surveillance and control, is not designed for self installation in households by individuals without technical knowledge.

## Excluding of responsibility in case of damaging data on a disk or other devices:

The manufacturer does not bear any responsibility in case of damaging or losing data on a disk or other devices during device operation.

## WARNING!

PRIOR TO UNDERTAKING ANY ACTION THAT IS NOT DESCRIBED FOR THE GIVEN PRODUCT IN USER'S MANUAL AND OTHER DOCUMENTS DELIVERED WITH THE PRODUCT, OR IF IT DOES NOT ARISE FROM THE USUAL APPLICATION OF THE PRODUCT, MANUFACTURER MUST BE CONTACTED UNDER THE RIGOR OF EXCLUDING THE MANUFACTURER'S RESPONSIBILITY FOR THE RESULTS OF SUCH AN ACTION.

http://www.e-camere.ro/camere-supraveghere.ip/Novus/NVIP-1DN3020H-IR-1P

All rights reserved © AAT Holding sp. z o.o.

## IMPORTANT SAFEGUARDS AND WARNINGS

http://www.e-camera.pl/kamere-supravgohere-ip/Novus/NVIP-1DN3020H-IR-1P



**WARNING!**

THE KNOWLEDGE OF THIS MANUAL IS AN INDESPENSIBLE CONDITION OF A PROPER DEVICE OPERATION. YOU ARE KINDLY REQUSTED TO FAMILIRIZE YOURSELF WITH THE MANUAL PRIOR TO INSTALLATION AND FURTHER DEVICE OPERATION.

**WARNING!**

USER IS NOT ALLOWED TO DISASSEMBLE THE CASING AS THERE ARE NO USER -SERVICEABLE PARTS INSIDE THIS UNIT. ONLY AUTHORIZED SERVICE PERSONNEL MAY OPEN THE UNIT

INSTALLATION AND SERVICING SHOULD ONLY BE DONE BY QUALIFIED SERVICE PERSONNEL AND SHOULD CONFORM TO ALL LOCAL REGULATIONS

1. Prior to undertaking any action please consult the following manual and read all the safety and operating instructions before starting the device.
2. Please keep this manual for the lifespan of the device in case referring to the contents of this manual is necessary;
3. All the safety precautions referred to in this manual should be strictly followed, as they have a direct influence on user's safety and durability and reliability of the device;
4. All actions conducted by the servicemen and users must be accomplished in accordance with the user's manual;
5. The device should be disconnected from power sources during maintenance procedures;
6. Usage of additional devices and components neither provided nor recommended by the producer is forbidden;
7. You are not allowed to use the camera in high humidity environment (i.e. close to swimming pools, bath tubs, damp basements);
8. Mounting the device in places where proper ventilation cannot be provided (e. g. closed lockers etc.) is not recommended since it may lead to heat build-up and damaging the device itself as a consequence;
9. Mounting the camera on unstable surface or using not recommended mounts is forbidden. Improperly mounted camera may cause a fatal accident or may be seriously damaged itself. The camera must be mounted by qualified personnel with proper authorization, in accordance with this user's manual.
10. Device should be supplied only from a power sources whose parameters are in accordance with those specified by the producer in the camera technical datasheet. Therefore, it is forbidden to supply the camera from a power sources with unknown parameters, unstable or not meeting producer's requirements;

All rights reserved © AAT Holding sp. z o.o.

# TABLE OF CONTENTS

**TABLE OF CONTENTS** ..... 4
**1. FOREWORD INFORMATION** ..... 5
1.1. General characteristics ..... 5
1.2. Technical specification ..... 6
1.3. Camera dimension ..... 7
1.4. Package contents ..... 7
**2. START-UP AND INITIAL IP CAMERA CONFIGURATION** ..... 8
2.1. Description of connectors and control tools ..... 8
2.2. Cameras mounting ..... 8
2.3. Desiccant mounting guide ..... 9
2.4. Starting the IP camera ..... 11
**3. NETWORK CONNECTION UTILIZING WEB BROSWER** ..... 12
3.1. Recommended PC specification for web browser ..... 12
3.2. Connection with IP camera via web browser ..... 12
**4. WWW INTERFACE - WORKING WITH IP CAMERA** ..... 14
4.1. Displaying live pictures. ..... 14
**5. ELECTRIC CONNECTORS AND ACCESORIES** ..... 15
5.1. Connecting power supply to the camera. ..... 15
**6. RESTORING FACTORY DEFAULTS** ..... 15
6.1. Restoring software factory defaults ..... 15

http://www.e-camere.ro/camera-supraveghere-ip/Novus/NVIP-1DN3020H-IR-1P

All rights reserved © AAT Holding sp. z o.o.

# 1. FOREWORD INFORMATION

## 1.1. General Characteristics

- Imager resolution: 1.3 megapixels (NVIP-1DN3000H/IR-1P, NVIP-1DN3020H/IR-1P)
- Imager resolution: 2.0 megapixels (NVIP-2DN3000H/IR-1P, NVIP-2DN3020H/IR-1P)
- Mechanical IR cut filter ,IR operation capability
- Min. Illumination from 0 lx with IR LED on
- Wide Dynamic Range (WDR) for enhanced image quality in diverse light conditions
- Digital Noise Reduction (DNR)
- Lens type: Standard, f=4.2 mm/F=1.8 (NVIP-1DN3000H/IR-1P)
  Standard, f=4.0 mm/F=1.6 (NVIP-2DN3000H/IR-1P)
  Auto iris DC, f=2.8 ~ 12 mm/F=1.4
  (NVIP-1DN3020H/IR-1P,NVIP-2DN3020H/IR-1P)
- Built-in LED illuminator: 24 pcs LED (NVIP-1DN3020H/IR-1P, NVIP-2DN3020H/IR-1P)
  30 pcs LED (NVIP-1DN3000H/IR-1P, NVIP-2DN3000H/IR-1P)
- Privacy zones: 4
- Compression: H.264
- Max video processing resolution: 1920x1080
  (NVIP-2DN3000H/IR-1P, NVIP-2DN3020H/IR-1P)
- Max video processing resolution: 1280 x 1024
  (NVIP-1DN3000H/IR-1P, NVIP-1DN3020H/IR-1P)
- Dual streaming: compression, resolution, speed and quality defined individually for each video stream
- RTP/RTSP protocol support for video transmission
- Post-alarm functions
- Hardware motion detection
- Built-in webserver: camera configuration through the website
- Wide range of responses to alarm events: e-mail with attachment, saving file on FTP server
- Software: NMS (NOVUS MANAGEMENT SYSTEM) for video recording, live monitoring, playback and remote IP devices administration
- Power supply: 12VDC, PoE (Power over Ethernet)

http://www.e-camera.ro/camere-supraveghere-ip/Novus/NVIP-1DN3020H-IR-1P

All rights reserved © AAT Holding sp. z o.o.

# FOREWORD INFORMATION



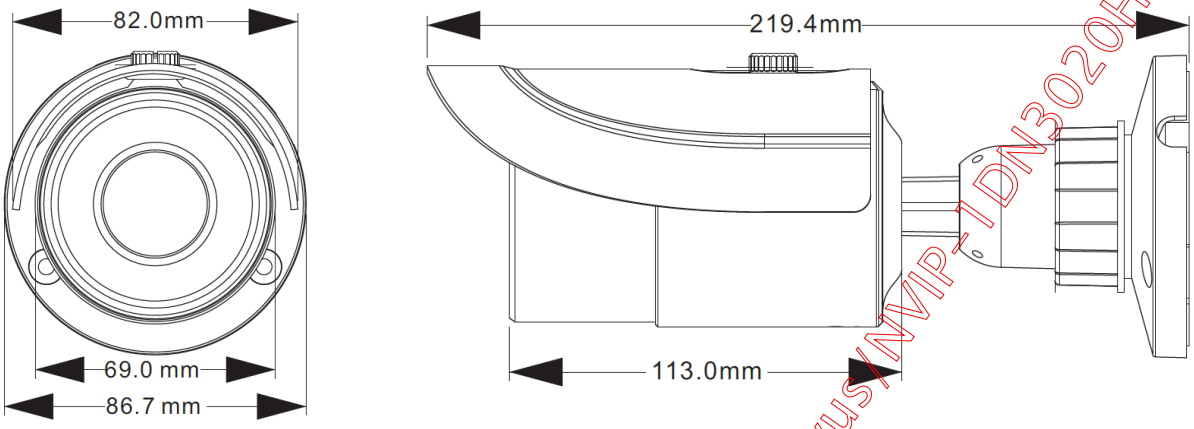
## 1.2. Technical specification

| | NVIP-1DN3000H/IR-1P | NVIP-1DN3020H/IR-1P | NVIP-2DN3000H/IR-1P | NVIP-2DN3020H/IR-1P |
|---|---|---|---|---|
| **IMAGE** | | | | |
| Pick-up Element | 1/3" CMOS imager | | | |
| Number of Effective Pixels | 1280 (H) x 1024 (V) | | 1920 (H) x 1080 (V) | |
| Min. Illumination | 0.1 lx/F=1.2 - color mode,<br>0.02 lx/F=1.2 - B/W mode,<br>0 lx - IR on | | | |
| Wide Dynamic Range (WDR) | Yes | | | |
| Digital Noise Reduction (DNR) | Yes | | | |
| **LENS** | | | | |
| Type | Standard,<br>f=4.2 mm/F=1.8 | Varifocal,<br>f=2.8 ~ 12 mm /F=1.4 | Standard,<br>f=4 mm/F=1.6 | Varifocal,<br>f=2.8 ~ 12 mm /F=1.4 |
| Angle of View (H) | 67° | 73° ~ 27° | 76° | 99° ~ 33° |
| **DAY/NIGHT** | | | | |
| Type | Mechanical IR cut filter | | | |
| Switching Mode | Auto/manual/light sensor | | | |
| **NETWORK** | | | | |
| Stream Resolution | 1280x1024 (SXGA),<br>1280x960(960P),<br>1280x720(720P),<br>640x480(VGA),<br>320x240(QVGA) | | 1920x1080 (FullHD),<br>1280x720(HD),<br>640x480(VGA),<br>320x240(QVGA) | |
| Frame Rate | 30 fps for each resolution | | | |
| Multistreaming Mode | 2 streams | | | |
| Video Compression | H.264 | | | |
| Number of Simultaneous Connections | Max. 4 | | | |
| Network Protocols Support | TCP/IP, DHCP, PPPoE, DDNS, SMTP, UPnP, RTSP, NTP, ONVIF | | | |
| PC Software | NOVUS NMS, Internet Explorer, Google Chrome, Opera, Mozilla Firefox | | | |
| **OTHER FUNCTIONS** | | | | |
| OSD | IE browser, Polish, English, Russian and Portuguese | | | |
| Privacy Zones | 4 | | | |
| Motion Detection | Yes | | | |
| Postalarm | 5 s ~ 2 min | | | |
| System Reaction to Alarm Events | E-mail with attachment, saving file on FTP server | | | |
| **IR LED** | | | | |
| Number | 42 | 36 | 42 | 36 |
| Range | 25 m | 20 m | 25 m | 20 m |
| Angle | 90° | | | |
| **INTERFACES** | | | | |
| Video Output | BNC | | | |
| Audio Input | 1 x Jack (3,5 mm) | | | |
| Network Interface | 1 x Ethernet - RJ-45 interface, 10/100 Mbit/s | | | |
| **INSTALLATION PARAMETERS** | | | | |
| Dimensions (mm) | 87 (Ø) x 219 (L) | | | |
| Weight | 602 g | 601 g | 602 g | 601 g |
| Enclosure | Aluminium, white, mounting bracket and sunshield in-set included | | | |
| Power Supply | PoE, 12 VDC | | | |
| Power Consumption | 3,6 W,<br>7,2 W (IR on) | 3,6 W,<br>7 W (IR on) | 3,6 W,<br>7,2 W (IR on) | 3,6 W,<br>7 W (IR on) |
| Degree of Protection | IP 66 | | | |

http://www.e-camere.ro/camere-supraveghere-ip/novus/NVIP-1DN3020H-IR-1P

All rights reserved © AAT Holding sp. z o.o.

### 1.3. Camera dimensions




### 1.4. Package contents

After you open the package make sure that the following elements are inside:

- IP camera
- Accessories bag
- Short version of user's manual
- CD containing manual and software

If any of this elements has been damaged during transport, pack all the elements back into the original box and contact your supplier for further assistance.

**CAUTION!**

**If the device was brought from a location with lower temperature, please wait until it reaches the temperature of location it is currently in. Turning the device on immediately after bringing it from a location with lower ambient temperature is forbidden, as the condensing water vapour may cause short-circuits and damage the device as a result.**

**Before starting the device familiarize yourself with the description and the role of particular inputs, outputs and adjusting elements that the device is equipped with.**

http://www.e-camere.ro/camere-supraveghere-ip/Novus/NVIP-1DN3020H-IR-1P

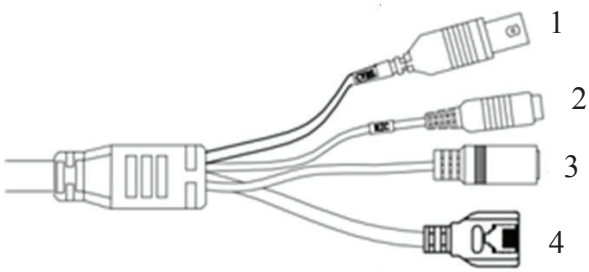
All rights reserved © AAT Holding sp. z o.o.

# FOREWORD INFORMATION

eng

## 2. START-UP AND INITIAL CAMERA CONFIGURATION

### 2.1 Description of connectors and control tools

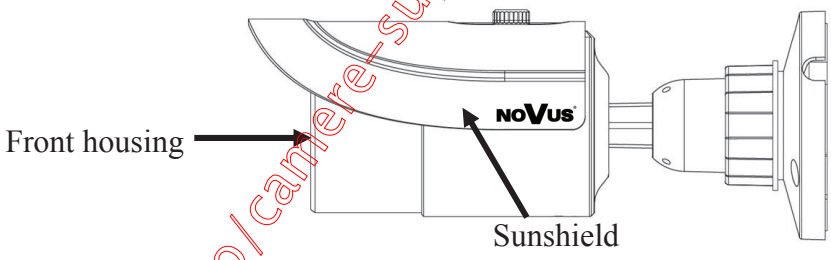



1. BNC video output
2. Audio input
3. Power supply 12VDC
4. 100 Mb/s Ethernet port (RJ-45 connector)

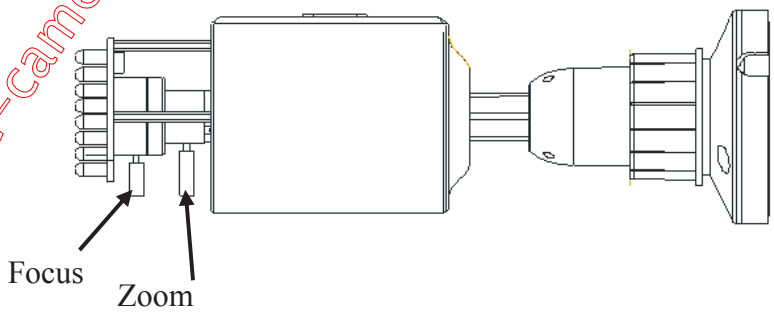
### 2.2 Zoom and focus adjustment

Feature available only for NVIP-1DN3020H/IR-1P and NVIP-2DN3020H/IR-1P cameras.

1. Remover sunshield and front housing.




2. Adjust zoom and focus.




3. Mount front housing and sunshield.

http://www.e-camere.ro/camere-supraveghere-ip/Novus/NVIP-1DN3020H-IR-1P

All rights reserved © AAT Holding sp. z o.o.

http://www.e-camere.ro/camere-supraveghere-ip/Novus/NVIP-1DN3020H-IR-1P

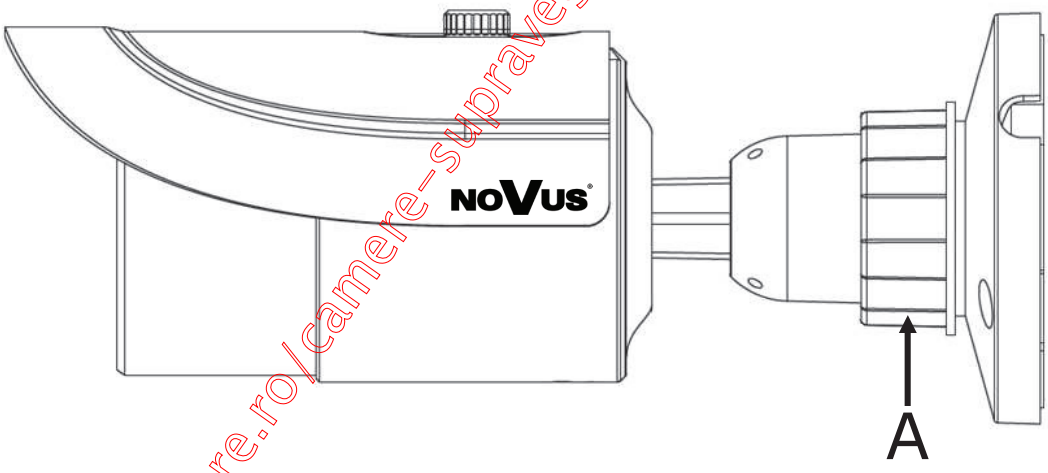


## 2.2. Cameras mounting

To mount a camera please follow the instructions below:

- Put the bracket to the wall in a desired mounting place (with cable hole). Taking the bracket's base screw holes as a pattern, mark future drilling holes for screws using a punch.
- Drill holes in accordance with previously done markings and base hole placement.
- Mount the camera with bracket on the ceiling/wall with three supplied self tapping screws.
- Loosen nut **"A"**.
- Adjust camera position.
- Adjust zoom and focus (Feature available only for NVIP-1DN3020H/IR-1P and NVIP-2DN3020H/IR-1P cameras).
- Tighten nut **"A"**.

**WARNING!** Please note that the wall or ceiling must have enough strength to support the IP Camera.




**WARNING!** In order to obtain declared degree of protection please seal the camera bracket to prevent water getting inside. Furthermore, when installing the bracket on rough/uneven surfaces, please additionally seal the junction with appropriate sealing mass. Please pay special attention to any mounting holes and if they are a loop-through ones, seal them too.

All rights reserved © AAT Holding sp. z o.o.

# START-UP AND INITIAL CAMERA CONFIGURATION

eng

## 2.4. Starting the IP camera

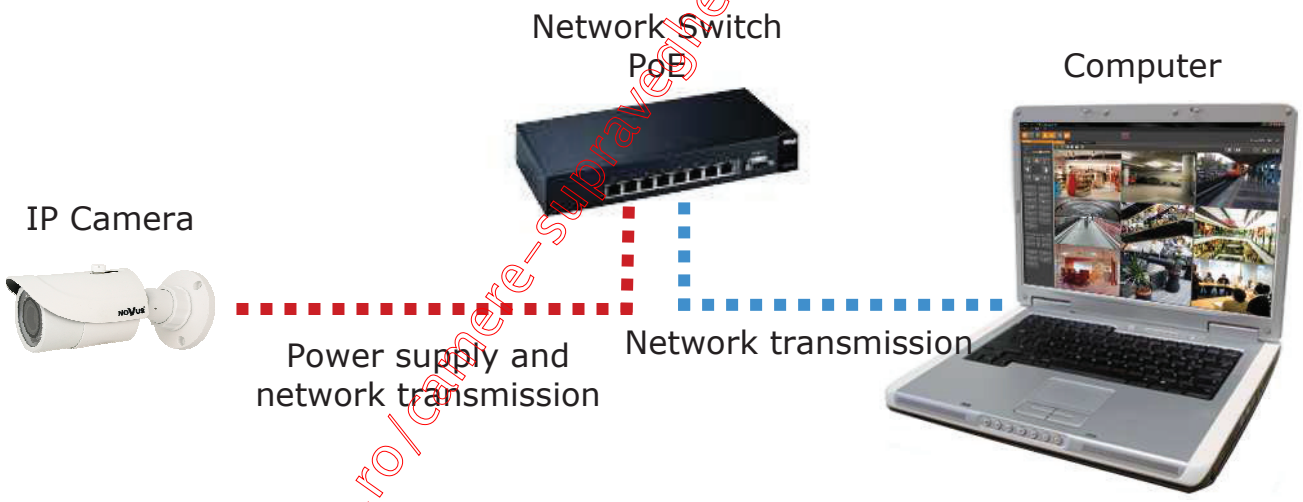
To run NOVUS IP camera you have to connect ethernet cable between camera and network switch.

To power it up you can connect it directly via power supply adapter with parameters compatible with camera power supply specification, or camera can be powered with PoE (IEEE 802.3af ) compatible switch.

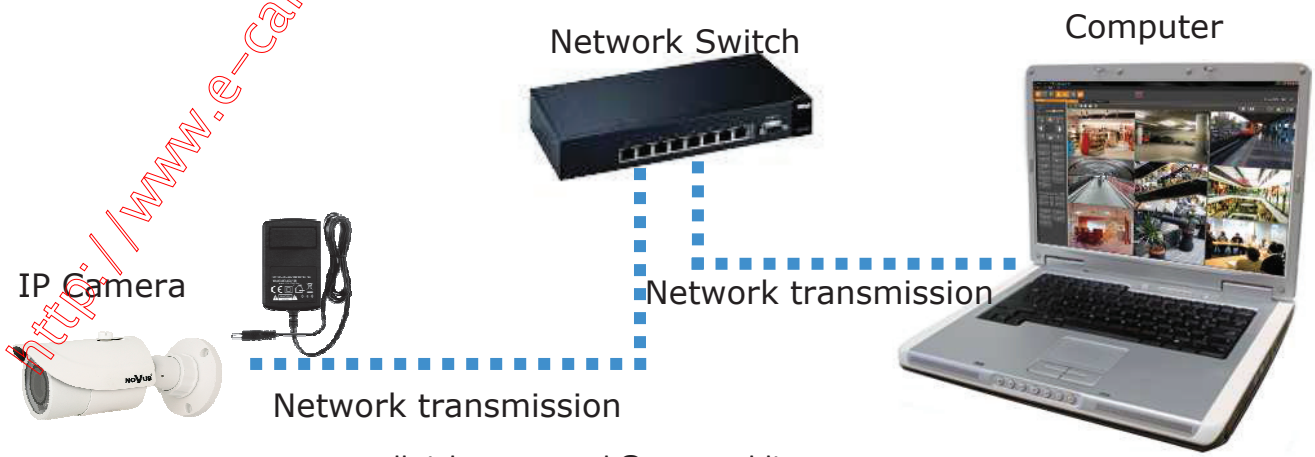
After connecting power supply it takes about 30 seconds to start camera. Then You can proceed to connect to the camera via web browser.

The recommended way to start an IP camera and perform its configuration is a connection directly to the network switch which is not connected to other devices. To obtain further information about network configuration parameters (IP address, gateway, network mask, etc.) please contact your network administrator.

- Connection utilising network switch with PoE support



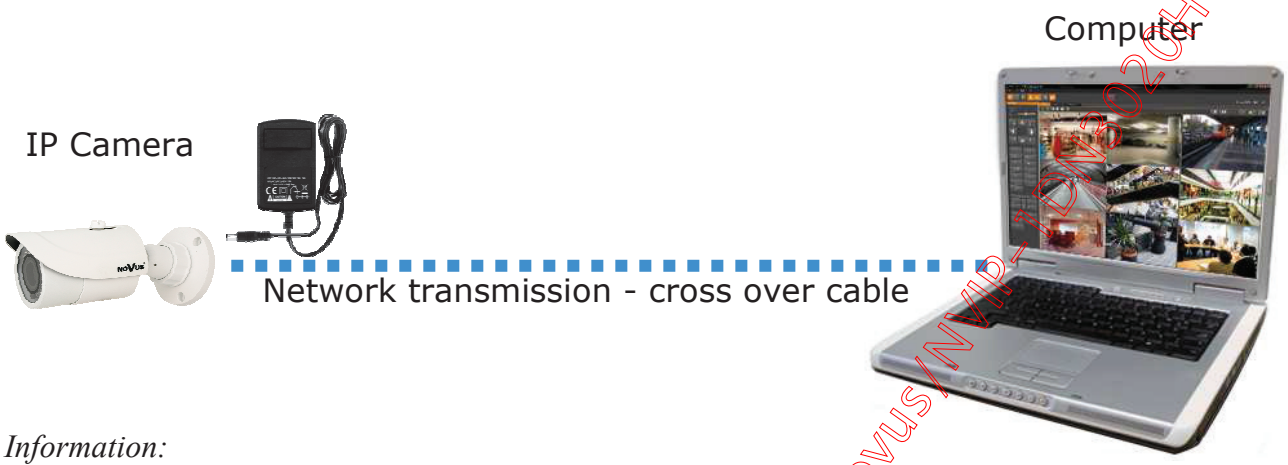

- Connection utilising external power supply and network switch




http://www.e-camere.ro/camere-supraveghere-ip/Novus/NVIP-1DN3020H-IR-1P

All rights reserved © AAT Holding sp. z o.o.

- Connection utilising external power supply directly to the computer




*Information:*

*Power supply adapter is not included. Please use power adapter with parameters specified in user 's manual.*

**Caution:**

**In order to provide protection against voltage surges/lightning strikes, usage of appropriate surge protectors is advised. Any damages resulting from surges are not eligible for service repairs.**

### 2.5. Initial configuration via the web browser

The default network settings for NVIP-… IP camera series are :

1. IP address= **192.168.1.200**
2. Network mask - **255.255.255.0**
3. Gateway - **192.168.1.1**
4. User name - **root**
5. Password - **pass**

Knowing the camera's IP address you need to appropriately set PC IP address, so the two devices can operate in one network subnet ( e.g. for IP 192.168.1.1, appropriate address for the camera ranges from 192.168.1.2 to 192.168.1.254, for example 192.168.1.60). It is not allowed to set the same addresses for camera and PC computer

You can either set a network configuration (IP address, gateway, net mask, etc.) of NOVUS IP camera yourself or select DHCP mode (DHCP server is required in this method in target network) by using web browser or by NMS software. When you use DHCP server check IP address lease and its linking with camera MAC address to avoid changing or losing IP address during device operation or network/ DHCP server breakdown. You have to remember to use a new camera IP address after changing network parameters.

After network setting configuration has been done, the camera can be connected to a target network.

http://www.e-camere.ro/camere-supraveghere-ip/Novus/NVIP-1DN3020H-IR-1P

All rights reserved © AAT Holding sp. z o.o.

# NETWORK CONNECTION UTILIZING WEB BROWSER



## 3. NETWORK CONNECTION UTILIZING WEB BROSWER

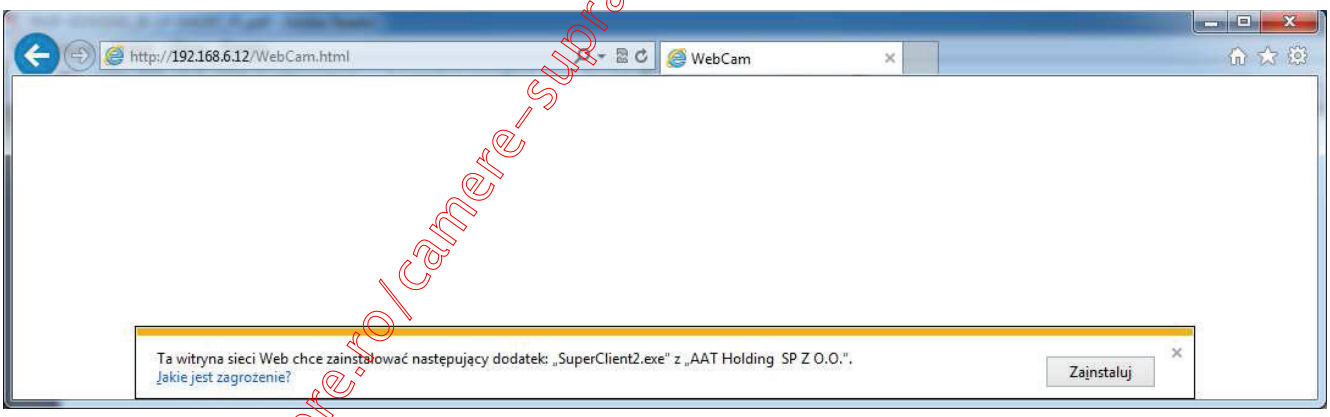
### 3.1. Recommended PC specification for web browser connections

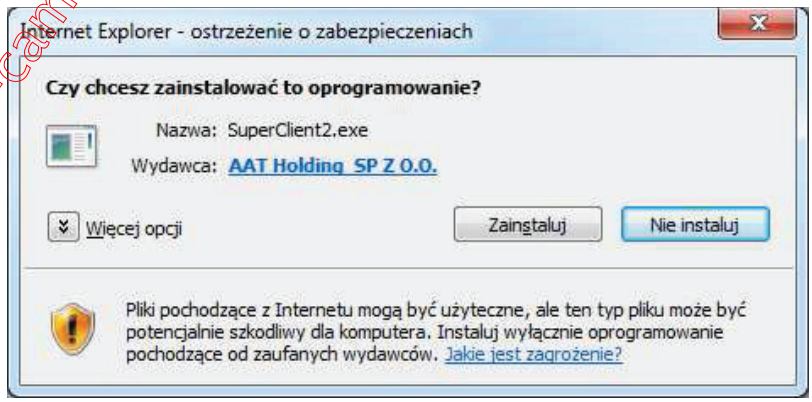
Requirements below apply to connection with an IP camera, assuming smooth image display in 1920x1080 resolution and 25 fps speed.

1. CPU **Intel Pentium IV 3 GHz** or newer
2. **RAM** Memory min. **512 MB**
3. VGA card (any displaying **Direct 3D with min. 128 MB RAM** memory)
4. OS **Windows XP / VISTA**
5. **Direct X** version **9.0** or newer
6. Network card **10/100/1000 Mb/s**

### 3.2. Connection with IP camera via web browser

You have to enter camera IP address in the address bar. When you connect to the camera, web browser will download the applet for displaying images from the camera. In Internet Explorer it may be necessary to accept an ActiveX control. To do this, click the right mouse button on the message, select "Install Active X control" and then click Install. After successfully SuperClient2 plug in downloading run and install it on a computer.


http://192.168.6.12/WebCam.html
WebCam
Ta witryna sieci Web chce zainstalować następujący dodatek: „SuperClient2.exe" z „AAT Holding SP Z O.O.".
Jakie jest zagrożenie?
Zainstaluj


Internet Explorer - ostrzeżenie o zabezpieczeniach
Czy chcesz zainstalować to oprogramowanie?
Nazwa: SuperClient2.exe
Wydawca: AAT Holding SP Z O.O.
Więcej opcji
Zainstaluj
Nie instaluj
Pliki pochodzące z Internetu mogą być użyteczne, ale ten typ pliku może być potencjalnie szkodliwy dla komputera. Instaluj wyłącznie oprogramowanie pochodzące od zaufanych wydawców. Jakie jest zagrożenie?

http://www.e-camere.ro/camere-supraveghere-ip/Novus/NVIP-1DN3020H-IR-1P

All rights reserved © AAT Holding sp. z o.o.

## NETWORK CONNECTION UTILIZING WEB BROWSER

If the installation fails, changing security settings for the IE browser is required. In order to do that, please choose: *Tools* > *Internet options* > *Security tab* > *Custom level* and:

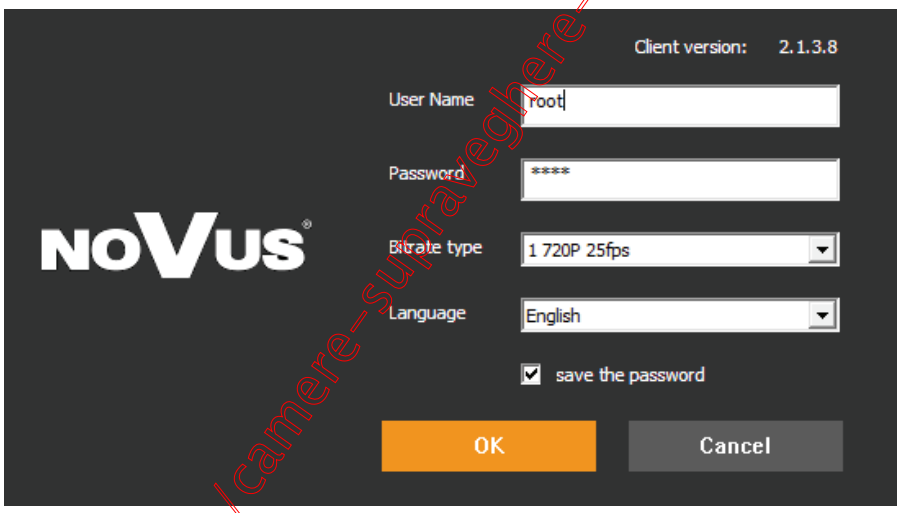
- Under *Download unsigned ActiveX controls* - select either Enable or Prompt
- Under *Initialize and script ActiveX controls not marked as safe* - select Enable or Prompt

You can also add the camera's IP address to "*trusted zone"* and set lowest security level for it.

In addition, when working in Windows Vista/7 the ActiveX applet may be blocked by Windows Defender or User account control. In such case you should allow to run this applet, or simply disable these functions.

eng

After successful installation login window will be displayed. Default user is **root** and default password is **pass.** For safety reasons, it is recommended to change default user name and password.

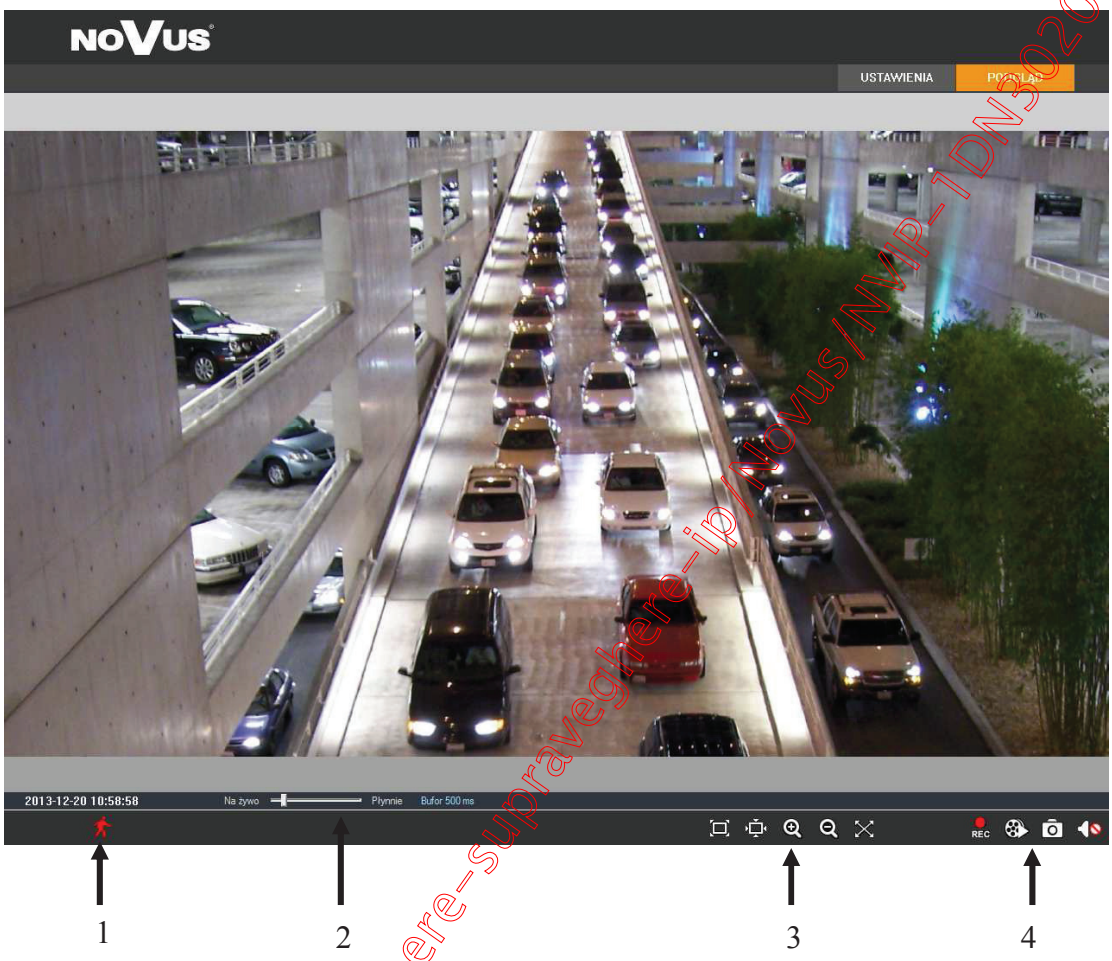



http://www.e-camere.ro/camere-supraveghere-ip/Novus/NVIP-1DN3020H-IR-1P

All rights reserved © AAT Holding sp. z o.o.

## 4. REMOTE PREVIEW

### 4.1 The Remote Preview Interface




1. Motion detection

Motion detection icon changes color from white to red when motion is detected.

Alarm icon changes color from white to red when alarm situation has occured.

2. Display fluency settings

It is possible to increase video display fluency by setting video buffor (0 ~ 4 seconds).

3. Video size settings

Fix size

Zoom in

Zoom in

Zoom out

Full screen

4. Local record

Start record

Playback

Snap

Enable / disable audio

http://www.ip-camere.ro/camere-supraveghere-ip/Novus/NVIP-1DN3020H-IR-1P

All rights reserved © AAT Holding sp. z o.o.

# 5. ELECTRIC CONNECTORS AND ACCESORIES

## 5.1. Connecting power supply to the camera.

Camera can be supplied using external power supply unit corresponding with the camera parameters or by using RJ45 network socket and PoE (802.3at Type 1 ) power supply unit.

*Information:*

*Power supply adapter is not included. Please use power adapter with parameters specified in user's manual.*

**Caution:**

**In order to provide protection against voltage surges/lightning strikes, usage of appropriate surge protectors is advised. Any damages resulting from surges are not eligible for service repairs.**

# 6. RESTORING FACTORY DEFAULTS

NOVUS IP cameras allow to restore defaults via software (web browser level).

## 6.1. Restoring factory defaults by software means

User can restore default settings of the IP camera except network settings (optional). To restore to default settings go to: "Advanced Config -> Config Backup & Restore" tab. Process of restoring takes about two minutes.

http://www.e-camere.ro/camere-supraveghere-ip/Novus/NVIP-1DN3020H-IR-1P

All rights reserved © AAT Holding sp. z o.o.